

METHOD FOR DETECTION OF MOLECULAR SPECIES IN A CRUDE SAMPLE  
USING CAPILLARY ELECTROPHORESIS

ABSTRACT OF THE DISCLOSURE

A method for detecting at least one molecular species in a crude sample is disclosed. The method comprises: acquiring a crude sample containing at least one molecular species; separating from the molecular species sample components that have size and masses greater and/or smaller than the molecular species of interest; pre-focusing molecular species in the crude sample within the capillary electrophoresis apparatus one or more times by applying voltage to the capillary for a period of time sufficient to cause electrophoretic migration of at least one molecular species in the sample up to a boundary between a low-electrolyte plug and a high-electrolyte buffer and applying a negative pressure differential to the capillary for a period of time sufficient to cause the pre-focused molecular species to be pushed substantially to its original position; electrophoretically separating the molecular species in the crude sample; and detecting the separated molecular species.